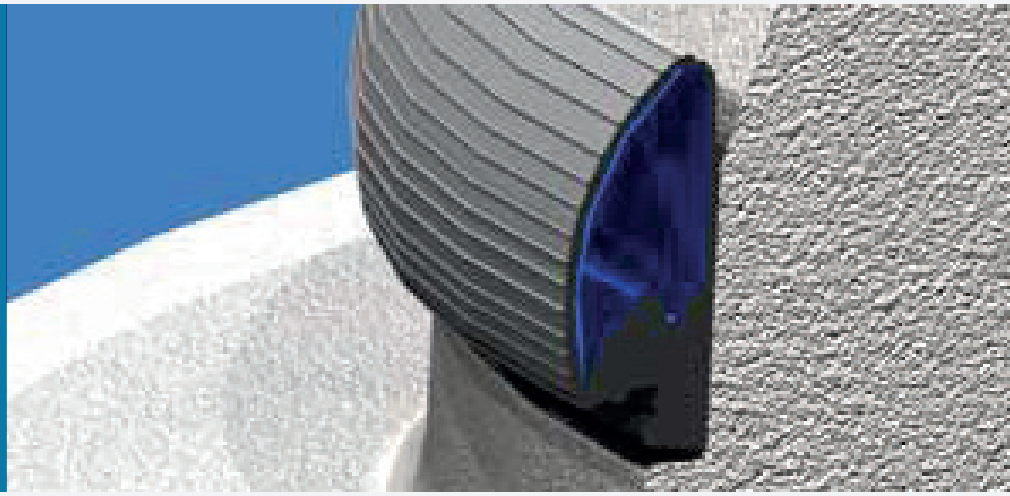
Forsheda 170 Self- Lubricating

Self-lubricating gaskets for concrete pipe & manholes

The next generation in prelubricated gaskets.



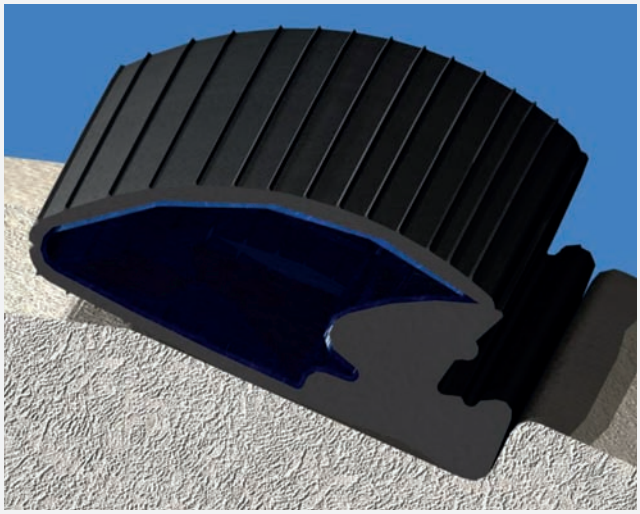
FEATURES

-Hinged closure for resisting gasket roll
-Reduced insertion force
-Specially formulated internal lubrication

Available for pipe & manhole offset joints.

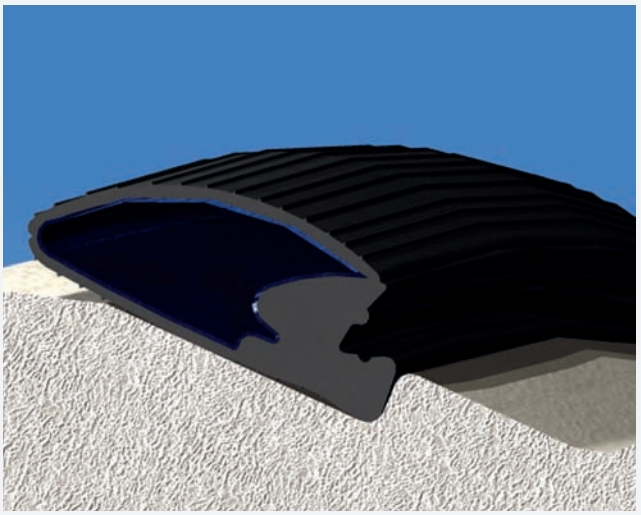
Conforms with ASTM C1619 Standard Specification for elastomeric seals.

The unique design and installation-friendly features of our self-lube gaskets translates to less installation time and lower costs.



SELF-LUBRICATING GASKETS FOR CONCRETE PIPE & MANHOLES

The Self-Lube Gasket is made from high quality materials and manufactured to the highest standards of the rubber gasket industry. The unique design and installation-friendly features translates to less installation time and lower costs. Call your Trelleborg Pipe Seals representative for more details.



ADVANTAGES

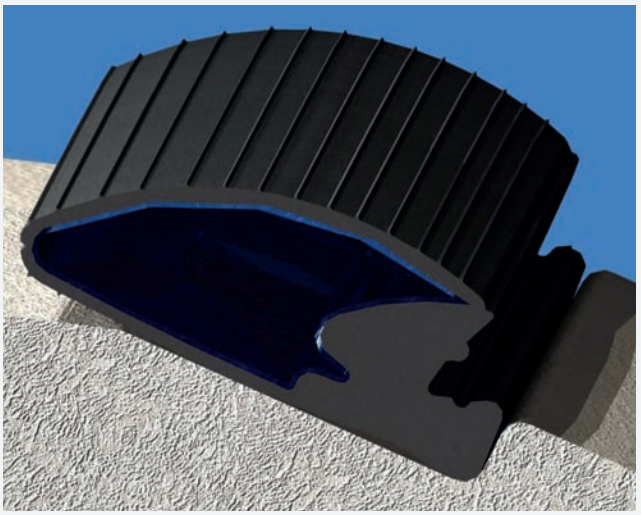
Contractor-friendly installation

- Installs on pipe spigot easily
- No external lube required
- Less chance of joint contamination
- Tube positioning helps center pipe
- Less insertion force required
- Faster installation equals labor savings

Meets the requirements of ASTM C1619 and ASTM C443

Made with EPDM rubber for high durability and UV Resistance

Manufactured in Milford, NH USA



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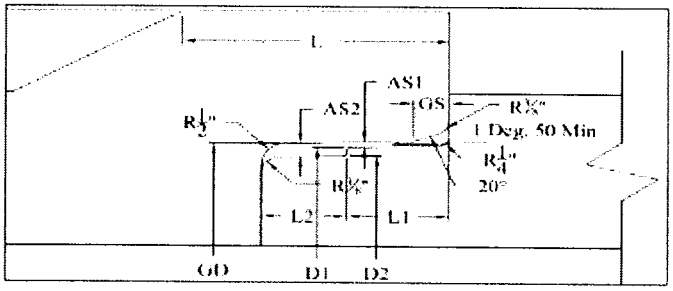
Forsheda F170 Self Lubricated Gasket

Physical Properties

Tensile Strength:	**1200 psi minimum**
Elongation at break:	**350 % Minimum**
Hardness:	**40 – 60 Shore A**
Oven Age Tensile reduction	**20% maximum reduction from original**
Oven Age Elongation reduction	**15% of original maximum**
Oven Age Hardness Increase	**25% of original maximum**
Compression Set	**25 % maximum**
Water Absorption	**15% maximum weight increase**
Ozone Resistance	**No cracks**
Liquid Immersion IRM 903 Oil	**80% maximum volume change**
Splice Strength	**Class 2**

Joint detail



Recommended Gasket		= SL135
Relaxed profile thickness	t_o	= 0.563
Thickness reduction factor for 12% stretch	r	= 0.945
Applied Gasket height (stretched 12%)	t_s	= t_o x r
		= 0.563 x 0.945
		0.532
Nominal gasket deformation in joint	δ_{nom}	= ((t_s - AS_2) / t_s) x 100
		= ((0.532 -0.326) / 0.532) x 100
		= 38.7%

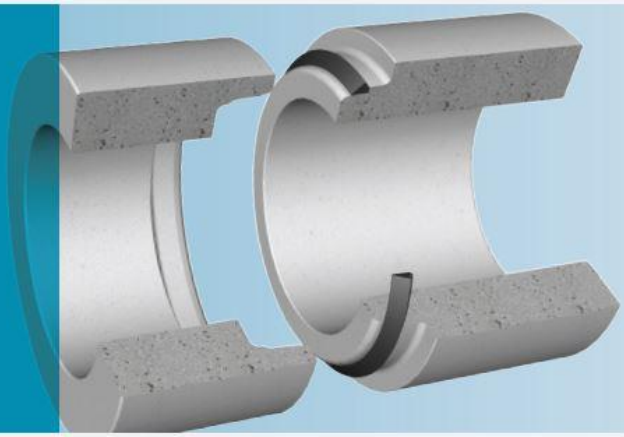
The sliding mantel of the gasket once rolled into the small annular space 'AS1' prevents any concrete to concrete contact and acts as a load distribution cushion between socket and spigot when transverse shear load is applied across the joint. The folded mantle is 0.079" thick and can be deformed up to 25% in maximum joint conditions before the joint becomes too difficult to assemble.

Single Off-Set SP Gasket

TRELLEBORG PIPE SEALS

Forsheda 104

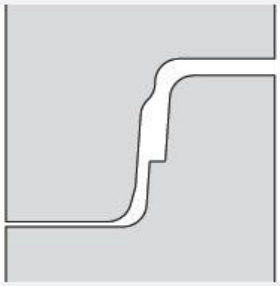
Seal for concrete pipe and manhole systems



SEAL DESIGN AND FUNCTION

Forsheda 104 is a sliding seal that is stretched onto the spigot end of the pipe or manhole. Lubricant is applied to the socket prior to jointing.

The joint design is standard in many countries. A drawing is available from Trelleborg Pipe Seals on request.



Typical joint design

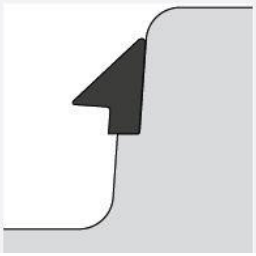
The special design of the joint and seal make the system easy to centre during jointing. This design permits installation with very low force.

MATERIAL

Synthetic SBR or EPDM rubber
Hardness 40±5 IRHD
Approved in accordance with EN 681-1
Protected against ozone

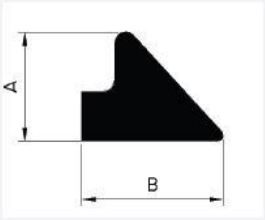
JOINT ASSEMBLY

Stretch the seal onto the spigot and position against the shoulder.



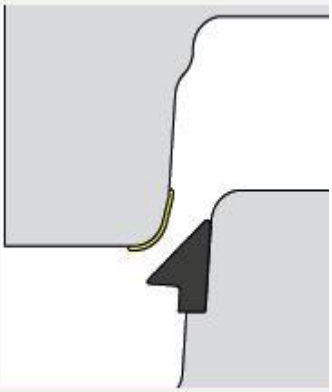
SEAL MARKING AND BOX LABELS

Each seal is marked with seal dimension and the date of manufacture. The box is labelled with the corresponding data.

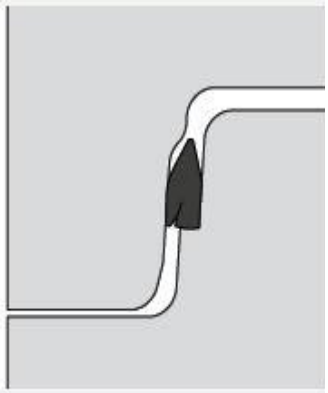


Equalize the stress in the seal by lifting and releasing at a few points. The seal must sit evenly against the spigot shoulder all around the pipe or manhole.

Apply lubricant to the socket. The lubricant must be evenly spread over the surface of the entire socket paying special attention to the radius at the front.



Centre the joint and assemble using suitable equipment.



Examples of Sizes

Model	Height	Width	Nominal Annular Gap
SP 259	0.622	0.75	.322-.360
SP 394	0.781	0.86	.408-.452
SP 542	0.918	1.21	.479-.531

Pipes and manholes with Forsheda 104 shall always be laid in accordance with applicable standards and regulations.

Please contact Trelleborg Pipe Seals for technical advice and joint design recommendations to meet your performance requirements.

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January 1, 2017

ASTM Product Compliance

The following products comply with

ASTM C 1619 Standard Specification for Elastomeric Seals for Joining Concrete Structures

C 443 Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets

SP Product Line – Single Offset Pipe Gaskets

SL Product Line – Pre-lubricated Pipe Gaskets

Forsheda 170 – Pre-lubricated Pipe Gaskets

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